

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION**

_____	)	
UNITED STATES OF AMERICA,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No. 4:11-cv-00077-RWS
	)	
AMEREN MISSOURI,	)	Honorable Rodney W. Sippel
	)	
Defendant.	)	
_____	)	

**PLAINTIFF’S MEMORANDUM IN SUPPORT OF ITS MOTION  
TO COMPEL PRODUCTION OF COMMUNICATIONS BETWEEN AMEREN AND  
THIRD PARTY UTILITY INDUSTRY ASSOCIATIONS**

**EXHIBIT B**

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION**

<b>UNITED STATES OF AMERICA,</b>	)	
	)	
<b>Plaintiff,</b>	)	
	)	<b>Civil Action No. 11-CV-00077</b>
<b>v.</b>	)	
	)	<b>Judge Rodney W. Sippel</b>
<b>AMEREN MISSOURI,</b>	)	
	)	
<b>Defendant.</b>	)	
	)	

**AMEREN MISSOURI'S RESPONSES AND OBJECTIONS TO  
PLAINTIFF'S SECOND SET OF INTERROGATORIES**

Ameren Missouri ("Ameren") hereby objects and responds to Plaintiff's Second Set of Interrogatories as follows:

**GENERAL OBJECTIONS**

1. Ameren incorporates its General Objections to Plaintiff's First and Second Requests for Production of Documents and its General Objections to Plaintiff's First Set of Interrogatories as and for its General Objections hereto.

2. Ameren reserves the right to reasonably supplement or amend its Responses to these Interrogatories as a result of further investigation, discovery, or otherwise.

**SPECIFIC OBJECTIONS AND RESPONSES**

**INTERROGATORY NO. 23:**

Describe in detail the nature of Defendant's membership in, participation in, or involvement with the Utility Air Regulatory Group (UARG), the Edison Electric Institute (EEI), Electric Power Research Institute (EPRI), and any other utility industry trade associations, including but not limited to the time periods of membership; the identity of Defendant's representatives to those organizations for each period of membership; the identity of any UARG, EEI, EPRI or other trade association meetings or conferences attended by Defendant; the identity

of any communications received from or relating to UARG, EEI, EPRI or other trade association; the nature of Defendant's relationship with UARG, EEI, EPRI or other trade association attorneys (including the factual basis for any claim of attorney-client relationship between Defendant and such attorneys); the identity of any UARG, EEI, EPRI, or other trade association meetings or conferences attended by Defendant pertaining to the Clean Air Act and its implementing regulations; and any communication received by Defendant from UARG, EEI, EPRI, or other trade association relating to or that pertains to the Clean Air Act or its implementing regulations. Also include in Your response the identity of every document that contains this information, and the name, title, and office of each person with knowledge of this information.

**RESPONSE TO INTERROGATORY NO. 23:**

Ameren objects to this Interrogatory on the grounds that it contains approximately 27 subparts on three distinct topics, and each of those discrete subparts should be set out in a separate interrogatory pursuant to Federal Rule of Civil Procedure 33(a). As written, this Interrogatory is overly broad and unduly burdensome in seeking, among other things, "the identity of every meeting or conference attended" by Defendant's representatives over a period of decades, whether or not it pertained to any of the topics at issue in this case; and the identity of every communication received from or related to these organizations over a similar time frame, whether or not they pertained to any issue in this case. Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome in that it contains no time limitation. Ameren will respond with information from 1996 forward. Ameren further objects to this Interrogatory on the grounds that it seeks information regarding "any other utility industry trade associations," to which Ameren belongs. Ameren further objects to Plaintiff's characterization of "trade associations," and, to the extent Plaintiff seeks information as to other unspecified "trade associations," Ameren objects on the grounds that this Interrogatory is vague and ambiguous. Ameren further objects to this Interrogatory on the grounds that to the extent it seeks information as to EEI's efforts on Ameren's behalf as they pertain to legislative issue or lobbying, it seeks information that is neither relevant to the subject matter of this action nor

reasonably calculated to lead to the production of admissible evidence, and/or calls for the production of privileged information.

Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome in that it seeks information that is neither relevant to the subject matter of this action nor reasonably calculated to lead to the production of admissible evidence to the extent it seeks the identity of “any UARG, EEI, EPRI or other trade association meetings or conferences attended by Defendant” and “any communications received from or relating to UARG, EEI, EPRI or other trade association.” Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome in that it seeks “the identity of every document” and the identity of “each person with knowledge.” Ameren further objects to this Interrogatory on the grounds that the request seeks information that is subject to the attorney-client or attorney work-product privileges.

Subject to and without waiving these objections and the General Objections, Ameren states that it has been a member of UARG since before 1996. UARG is a voluntary, non-profit association of electric utility companies and four trade associations. It was formed to advance the common legal interests of its members in matters pertaining to air quality regulation under the CAA, including by participating in rulemaking proceedings before the EPA and in judicial proceedings involving challenges to EPA regulations under the CAA. In administrative proceedings, UARG submits comments on proposed rulemaking under the CAA. In the courts, UARG files petitions to review EPA final rules and intervenes in proceedings initiated by others to review EPA final rules. UARG may also participate in other administrative or judicial proceedings, including as an amici in certain court matters. The law firm of Hunton & Williams LLP is the legal advisor to UARG and its members. Hunton & Williams LLP obtains

confidential information from UARG and its members for the purpose of rendering legal services to UARG and its members. Hunton & Williams LLP provides only legal advice to UARG and its members. UARG and its members are frequently preparing for or engaging in litigation over USEPA rules, including adoption and implementation. Indeed, many EPA rulemakings under the CAA result in judicial challenges from UARG. Plaintiff is quite familiar with who UARG is and what UARG does. Michael Menne, Steve Whitworth and Ken Anderson have been Ameren's representatives to UARG during the period of 1996 to the present.

According to its website, the Edison Electric Institute ("EEI") is the association of U.S. Shareholder-Owned Electric Companies. Plaintiff is quite familiar with who EEI is and what EEI does. Its members represent approximately 70 percent of the U.S. electric power industry. Organized in 1933, EEI works closely with all of its members, representing their interests and advocating equitable policies in legislative and regulatory arenas. EEI provides public policy leadership, critical industry data, strategic business intelligence, conferences and forums, and products and services to its members. Ameren has been a member of EEI since before 1996. Given the breadth of EEI's topic areas, there are a number of Ameren employees who have worked with EEI over that period, among them Joseph Power, Ameren's Vice President of Legislative Affairs.

According to its website, the Electric Power Research Institute, Inc. ("EPRI") conducts research and development relating to the generation, delivery and use of electricity for the benefit of the public. An independent, nonprofit organization, EPRI brings together its scientists and engineers as well as experts from academia and industry to help address challenges related to the electricity industry, including reliability, efficiency, health, safety and the environment. EPRI also provides technology, policy and economic analyses to drive long-range research and

development planning, and supports research in emerging technologies. Ameren has been a member of EPRI since before 1996. Plaintiff is quite familiar with who EPRI is and what EPRI does. Plaintiff has recently taken third-party document discovery from EPRI and EPRI has produced a significant number of documents to Plaintiff. Given the breadth of EPRI's topic areas, there are a number of Ameren employees who have worked with EPRI over that period, among them Ken Stuckmeyer and Joseph Sind.

Ameren further states that it has produced or will produce, pursuant to Federal Rule of Civil Procedure 33(d), business records from which information responsive to this Interrogatory can be derived or ascertained.

**INTERROGATORY NO. 24:**

Identify and describe in full and complete detail all communications, oral and written, between Defendant and any other utility or utility industry trade association (including their agents and attorneys), and all information received either directly or indirectly from any utility industry trade association (including, but not limited to EEI, UARG, EPRI, SERC Reliability Corporation, etc.) from 1996 to the present, relating to the meaning, interpretation, or application of the routine maintenance, repair and replacement provisions in federal and state regulations implementing the NSR provisions of the Clean Air Act, including but not limited to interpretations by U.S. EPA, states, and utilities; the method by which emissions calculations must be performed under NSR regulations for determining whether there has been a "net emission increase" associated with a construction project; the definition of "major modification" under the NSR regulations; *Wisconsin Electric Power Company v. Reilly*, 893 F.2d 901 (7<sup>th</sup> Cir. 1990) and the administrative determinations that were the subject of that case; and obtaining applicability determinations from EPA or a state concerning whether a maintenance, repair, or replacement activity is a "major modification" under federal or state regulations implementing the NSR provisions of the Clean Air Act. Include in Your response the identity of every document that contains this information, and the name, title, and office of each person with knowledge of this information.

**RESPONSE TO INTERROGATORY NO. 24:**

Ameren objects to this Interrogatory on the grounds that it consists of at least six discrete subparts, and each of those subparts should be set out in a separate interrogatory pursuant to Federal Rule of Civil Procedure 33(a). Ameren further objects to this Interrogatory on the

grounds that it is overly broad and unduly burdensome in that it seeks the identity of “all communications,” and the identity of communications to and from “any other utility or utility industry trade association (including their agents and attorneys),” including those unrelated to the Clean Air Act’s new source review program. Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome in its request to identify “all information” received from “any utility industry trade association.” Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome in that it seeks “the identity of every document” and the identity of “each person with knowledge.” Ameren incorporates its objections and response to Interrogatory No. 23 as and for its objections and response to this Interrogatory. Ameren further objects to this Interrogatory on the grounds that the request seeks information that is subject to the attorney-client or attorney work-product privileges.

Subject to and without waiving these objections and the General Objections, Ameren states that it has produced or will produce, pursuant to Federal Rule of Civil Procedure 33(d) non-privileged business records from which information responsive to this Interrogatory can be derived or ascertained, if any exist.

**INTERROGATORY NO. 25:**

Describe in detail the factual and legal basis of the following:

- a. Your denial that the Rush Island Plant was and is an “installation” subject to the requirements of Missouri’s PSD program, as stated in Your Answer to Paragraph 61 of the Amended Complaint (ECF No. 74).
- b. Your denial that the Rush Island Plant “was and is a ‘Part 70 installation’ within the meaning of the Missouri Title V regulations” as stated in Your Answer to Paragraph 63 of the Amended Complaint (ECF No. 74).

Include in Your response the identity of every document that contains information You allege supports Your contention, and the name, title, and office of each person with knowledge of this information.

**RESPONSE TO INTERROGATORY NO. 25:**

Ameren objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome in that it seeks “the identity of every document” and the identity of “each person with knowledge.” Ameren further objects to this Interrogatory on the grounds that the request may seek information that is subject to the attorney-client or attorney work-product privileges. Ameren further objects to this interrogatory to the extent it mischaracterizes or omits pertinent elements of the cited allegations or Ameren’s responses.

Subject to and without waiving these objections and the General Objections, Ameren states that it denies Paragraph 63 because that paragraph alleges that the Rush Island plant “was and is” a “ ‘Part 70’ installation within the meaning of . . . 10 C.S.R 10-6.065(2)(D),” a subsection of the regulations that either did not exist or that provided no definition of a “Part 70 Installation” during the relevant times. With respect to Paragraph 61 of the Amended Complaint, Ameren denies that the Amended Complaint correctly cites to the part of the Missouri regulations that housed Missouri’s PSD rules at all times relevant. Ameren further denies the implication that all of the individual components at the Rush Island Plant are, by themselves or collectively, an “installation” as defined by the relevant rules at the relevant times. Ameren further denies that the Rush Island Plant was and is “subject to the requirements of Missouri’s PSD program. 10 CSR § 10-6.060(6) and (8),” as stated in Paragraph 61 of the Amended Complaint, because PSD requirements have never become applicable.



**INTERROGATORY NO. 26:**

If You contend that any provision of 10 C.S.R. 10-6.061(3)(B) (7/3/11), or any identical provision contained in any previous publication of the Missouri Regulations, applies to any Project in this case, describe in detail all factual and legal bases for Your contention. Include in Your response the identity of every document that contains information You allege supports Your contention, and the name, title, and office of each person with knowledge of this information.

**RESPONSE TO INTERROGATORY NO. 26:**

Ameren objects to this Interrogatory on the grounds that Plaintiff's contention interrogatories are premature at this early stage of discovery. Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome in that it seeks "the identity of every document" and the identity of "each person with knowledge," particularly to the extent it asks Ameren to identify non-Ameren parties. Ameren further objects to this interrogatory on the grounds that the request may seek information that is subject to the attorney-client or attorney work-product privileges. Ameren objects to this interrogatory because it incorrectly implies that 10 CSR § 10-6.061(3)(B) existed and remained unchanged at all times relevant. Ameren will interpret the interrogatory to be seeking information pertaining to 10 CSR § 10-6.061(3)(B) or any prior, comparable provision. Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome to the extent it requests that Ameren identify the host of court decisions, statutes, rules, applicability determinations, letters, regulatory inaction, inspection reports and other materials, much of which is or may already be known to EPA, that are relevant to whether a given project or activity does not implicate NSR permitting requirements because it is an "Excluded Activity" pursuant to 10 CSR § 10-6.061(3)(B).

Subject to and without waiving these objections and the General Objections, Ameren states that the Projects are excluded from construction permitting requirements by the plain

language of 10 CSR § 10-6.061(3)(B), or comparable, prior provisions of the Missouri rules, because the Projects comprised the “[r]eplacement of boiler tubes” (10-6.061(3)(B)(1)(D)), and/or the “[r]eplacement of . . . turbines as part of a normal maintenance program” (10-6.061(3)(B)(1)(F)). The rule recognizes that these are “examples” of routine activities. Moreover, as recognized by the rule and for the reasons stated in Ameren’s response to Interrogatory No. 22, the Projects did not cause “any increase” in “the potential to emit” and did not have a negative “effect on air quality[,] of the emissions of any air contaminant” including SO<sub>2</sub>. (10-6.061(3)(B)(1)). The above-quoted plain language of the regulation placed Ameren on notice (and would reasonably place regulated Missouri entities on notice) that such activities were exempt from construction permitting requirements under the Missouri SIP, including because such activities were considered routine and were determined not to cause emission increases. Moreover, the fact that the Missouri SIP excludes from construction permitting requirements the replacement of entire “turbines” shows that permitting exclusions/exceptions were not, and were not intended to be, *de minimis* in scope.

The documents that support Ameren’s contentions in this regard include the relevant portions of the Missouri regulations, which were first promulgated in 1995. Ameren states that discovery is ongoing, its investigation continues, and that it will supplement its response as appropriate.

**INTERROGATORY NO. 27:**

Describe in detail the factual and legal basis of Your contention that “Some or all of the Projects at issue increased the efficiency of Rush Island’s boilers and turbines,” as stated in your Twenty-Seventh Defense, including but not limited to the following information:

- a. describe in detail each such alleged “efficiency increase,” including but not limited to how and why You expected the Project to achieve the alleged efficiency increase;

- b. identify the parts of the Rush Island Plant that You contend were made more efficient by any Project;
- c. describe in detail the units You used to measure the alleged efficiency increase and the methodology or formula You used to measure or quantify the alleged efficiency increase;
- d. quantify the amount of the alleged “efficiency increase” expected to result from the Project;
- e. quantify the amount of the alleged “efficiency increase” realized as a result of the Project; and
- f. state whether You used the expected or realized efficiency increase in any production cost modeling, and, if so, identify the specific production cost modeling run inputs and outputs, by Bates range, which incorporate or reflect the efficiency increase.

Include in Your response the identity of every document that contains information You allege supports Your contention, and the name, title, and office of each person with knowledge of this information.

**RESPONSE TO INTERROGATORY NO. 27:**

Ameren objects to this Interrogatory on the grounds that each of its discrete subparts should be set out in a separate interrogatory pursuant to Federal Rule of Civil Procedure 33(a). Ameren objects to this Interrogatory on the grounds that Plaintiff’s contention interrogatories are premature at this early stage of discovery and address matters that will or may be the subject of expert reports and testimony, which are not yet due. Ameren further objects to this Interrogatory on the grounds that the phrase “[d]escribe in detail” is vague in this context. Ameren further objects to this Interrogatory on the grounds that it is vague and ambiguous to the extent it seeks a “legal basis” for the factual contention that the Projects increased efficiency, because efficiency is not a legal issue. Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome in that it seeks “the identity of every document” and the identity of “each person with knowledge.” Ameren further objects to this Interrogatory on the grounds

that the request may seek information that is subject to the attorney-client or attorney work-product privileges.

In or about March 1999, Ameren completed the replacement of its high pressure and intermediate pressure turbines at Unit 2 of its Labadie plant. Thereafter, Ameren performed a study analyzing the performance of the new turbines to measure the efficiency improvement realized by the replacement. That study demonstrated that Labadie Unit 2 was realizing greater megawatt capacity without additional heat input, and that net heat rate improved. Given the successful replacement at Labadie 2, the decision was made to effect similar replacements at Rush Island Units 1 and 2. Based on the performance of the Labadie turbine replacements, Ameren expected to achieve efficiency gains.

In the fall of 2001, the high pressure and intermediate pressure turbines were replaced at Rush Island Unit 1. The replacement turbines performed the same function as the existing turbines, but did so with better efficiency, extracting more energy out of the incoming steam than did the turbines that were being replaced.

At the same time, Ameren also replaced portions of the Unit 1 superheater to correct a design flaw that had existed since its original construction. That design flaw was such that the superheater failed to absorb the designed amount of heat from the boiler, and thus failed to achieve the design-specified steam temperature at the turbine inlet orifice (1000° F). The actual measured steam temperature at the turbine inlet orifice was consistently low, averaging between 960° F and 985° F. Accordingly, and after consulting with its vendors, Ameren replaced a portion of the superheater boiler tubes with additional superheater boiler tube surface, so that the superheater section of the boiler would absorb additional heat (without the need for additional heat input), thus allowing the steam to reach the design-specified temperature of 1000° F before

it passed into the replaced high pressure and intermediate pressure turbines. This replacement of certain of the superheater's boiler tubes improved the boiler's efficiency in the manner described above.

The combined efficiency increase of these two projects was measured through the improvement to the unit's heat rate. The gross turbine cycle heat rate, or "GTCHR," improved following the replacement.

The same design flaw existed with respect to the superheater at Rush Island Unit 2, and so in the fall of 2003, Ameren carried out the same replacement of portions of the superheater's boiler tubes while also replacing the high pressure and intermediate pressure turbines.

Ameren personnel with knowledge relevant to this Interrogatory include: David Boll, Jeff Shelton, Joseph Sind, and Kenneth Stuckmeyer. Documents relevant to this Interrogatory include the heat balance diagrams for each Unit, as updated over time; the work order and project justification documents for these projects; and the Labadie turbine study. Ameren states that discovery is ongoing, its investigation continues, and that it will supplement its response as appropriate. This issue may also be the subject of expert testimony, and Ameren reserves all rights to disclose such expert testimony in accordance with the schedule established by the Court.

**INTERROGATORY NO. 28:**

Describe in detail the factual and legal basis of Your contention that "Any emissions increase is due to increased consumer demand on Ameren Missouri's system," as stated in Your Twenty-Sixth Defense, including but not limited to the following information:

- a. provide the methodology and results of all calculations performed to support this contention, the date(s) on which such calculations were initially performed, and the identity of each document in which the methodology and/or calculations are found;

- b. describe in detail Your projection of emissions expected to result from each Project;
- c. describe in detail Your projection of “increased consumer demand” following each Project, including but not limited to Your projection of the rate of growth in consumer demand prior to each Project; and
- d. if you so contend, describe in detail the factual basis for Your contention that any projected emissions increases were due *solely* to increased consumer demand on Ameren Missouri’s system.

Include in Your response the identity of every document that contains information You allege supports Your contention, and the name, title, and office of each person with knowledge of this information.

**RESPONSE TO INTERROGATORY NO. 28:**

Ameren objects to this Interrogatory on the grounds that Plaintiff’s contention interrogatories are premature at this early stage of discovery. Ameren further objects to this Interrogatory on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence because it mischaracterizes the law and facts. Among other things the interrogatory incorrectly implies a requirement to generate “calculations” and to make a projection of emissions “expected to result” from the projects at issue. In addition, the interrogatory incorrectly assumes that the projects were expected to cause an emission increase and, to the extent that it seeks evidence showing that “projected emissions increases were due *solely* to increased consumer demand on Ameren Missouri’s system,” it mischaracterizes the applicable law. Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome in that it seeks “the identity of every document” and the identity of “each person with knowledge.” Ameren further objects to this Interrogatory on the grounds that the request may seek information that is subject to the attorney-client or attorney work-product privileges.

Subject to and without waiving these objections and the General Objections, Ameren states that, as described in response to Interrogatory No. 22, the projects at issue were not the sort of projects that would be expected to increase, or did increase, the rate of emissions. Moreover, to the extent that emissions actually increased following the projects, both of the Rush Island units were capable of accommodating such increased emissions, both because: (a) prior to the Projects, the Rush Island units were not using their available capacity; and (b) because the Projects did not cause an increase in the Units' rate of emissions.

Because electricity cannot be stored when it is generated, but must be used immediately, it follows that all the electricity Ameren generates at a given time is used by the marketplace, and as a matter of common sense, use and demand are the same in this market. For these reasons, increased market demand is the cause of any increases in actual emissions following the Projects. EPA's Jon Knodel has recognized this common-sense point: "An increase in emissions from the boilers from one year to the next is not that unusual. Most utility boilers have wide operating ranges and can adjust those ranges consistent with the economics of the grid. ... Based on many factors, some units will have increased electrical output from prior years while others will decrease."

Moreover, during the period of 1996 to 2011, the American economy, and its corresponding demand for electricity, grew nearly every year. During the same period, deregulation of the electricity industry became more widespread, including in Missouri, and as a result, the geographic market for Ameren's electricity expanded significantly.

Recognizing its importance, EPA expanded (in the 2002 NSR reform rules) the reach of the demand growth exclusion from just the electric utility sector to all industries, even though EPA had in earlier proposed rulemakings expressed concerns about the exclusion's viability.

Thus, EPA reaffirmed the demand growth exclusion despite its earlier-stated concern that “with respect to the electric power industry in particular ... attempting to discern whether increased utilization and emissions should be attributed to physical or operational changes versus purely independent demand-satisfying increased capacity utilization will be much more difficult in the future, as restructuring in the electric power industry allows electric generating companies to compete for retail customers.” 63 Fed. Reg. 39860 (July 24, 1998). Indeed, EPA itself stated that “[o]ne can therefore predict that any physical or operational change will result in an emissions increase to the extent that there is market demand for additional power.” (*Id.*) Having reaffirmed the vitality of the demand growth exclusion despite having specifically articulated these concerns, EPA cannot now be heard to argue that the NSR/PSD rules do not exclude increases in emissions due to growth in market demand.

Ameren incorporates its response to Interrogatory No. 22 as and for its response to this Interrogatory. Ameren states that discovery is ongoing, its investigation continues, and that it will supplement its response as appropriate. This issue may also be the subject of expert testimony, and Ameren reserves all rights to disclose such expert testimony in accordance with the schedule established by the Court.

**INTERROGATORY NO. 29:**

For each of the following Project Justification Data tables identified by Bates range below, identify each and every production cost model run, by Bates range, that was used to prepare each such Project Justification Data table:

<b>Bates Beg</b>	<b>Bates End</b>
AM-00075700	AM-00075700
AM-00075702	AM-00075702
AM-00075713	AM-00075713
AM-00075714	AM-00075714
AM-00075715	AM-00075715
AM-00075716	AM-00075716



AM-00075718	AM-00075718
AM-00075719	AM-00075719
AM-00075720	AM-00075720
AM-00075721	AM-00075721
AM-00075722	AM-00075722
AM-00075723	AM-00075723
AM-00075724	AM-00075724
AM-00075725	AM-00075725
AM-00075726	AM-00075726
AM-00075727	AM-00075727
AM-00075728	AM-00075728
AM-00075729	AM-00075729
AM-00075730	AM-00075730
AM-00075731	AM-00075731
AM-00075732	AM-00075732
AM-00075733	AM-00075733
AM-00075734	AM-00075734
AM-00075736	AM-00075736
AM-00075737	AM-00075737

Include in Your response the name, title, and office of each person with knowledge of each identified production cost model run.

**RESPONSE TO INTERROGATORY NO. 29:**

In addition to the General Objections, Ameren objects to this Interrogatory on the grounds that it consists of 25 discrete subparts and that each of those discrete subparts should be set out in a separate interrogatory pursuant to Federal Rule of Civil Procedure 33(a). Ameren further objects to this Interrogatory on the grounds that it is unduly burdensome and harassing. The information sought by this Interrogatory is not maintained in the ordinary course of business, and so Interrogatory No. 29 invites speculation. The files identified above do not specify the relevant sources of information, and that information is not otherwise retained. Furthermore, because of the large number of files identified above, the large number of iterations of related files, and because many of these documents were created over a decade ago, the authors and users of these files cannot recall which files are related to which project justification

tables, but instead, to make such a determination they would be required to manually compare hundreds of files, and even then any answer would still be speculative. Ameren estimates that the time necessary to answer this Interrogatory with respect to a single one of the documents identified in the table above is 3 hours or more. Because this Interrogatory improperly combines 25 interrogatories into one, in violation of FRCP 33(a), the total burden imposed by this single Interrogatory is at least 75 hours. Moreover, Ameren has produced or will produce documents sufficient to enable Plaintiff to conduct this inquiry; and the burden to conduct this inquiry is the same for Plaintiff as it is for Ameren. Ameren further objects on the grounds that the information sought by this Interrogatory is not relevant to the subject matter of this litigation and this Interrogatory is not reasonably calculated to lead to the discovery of admissible evidence. Given the foregoing, the burden imposed by this Interrogatory far outweighs its likely benefit.

**INTERROGATORY NO. 30:**

Identify each final full work order authorization and project justification, by Bates range, that You prepared for the following:

- a. the replacement of the primary superheater at Rush Island Unit 1 in 2001;
- b. the replacement of the primary superheater at Rush Island Unit 2 in 2003;
- c. the replacement of the intermediate pressure/high pressure turbine at Rush Island Unit 1 in 2001;
- d. the replacement of the intermediate pressure/high pressure turbine at Rush Island Unit 2 in 2003;
- e. the replacement of the economizer, reheater, and lower slope tubes at Rush Island Unit 1 in 2007;
- f. the replacement of the economizer and reheater at Rush Island Unit 2 in 2010;
- g. the replacement of the air preheaters at Rush Island Unit 1 in 2007; and
- h. the replacement of the air preheaters at Rush Island Unit 2 in 2010.

Include in Your response the name, title, and office of each person with knowledge of each identified final full work order authorization and project justification.

**RESPONSE TO INTERROGATORY NO. 30:**

Ameren objects to this Interrogatory on the grounds that it consists of at least 8 discrete subparts and that each of those discrete subparts should be set out in a separate interrogatory pursuant to Federal Rule of Civil Procedure 33(a).

Subject to and without waiving these objections and the General Objections, the following table includes Ameren's current understanding regarding the work order authorizations and project justifications for the projects identified in (a) thru (h) of this Interrogatory. Ameren personnel with knowledge relevant to this Interrogatory include: David Boll, Patrick Morrell, Robert Schweppe, and Allen Toennies. Ameren states that discovery is ongoing, its investigation continues, and that it will supplement its response as appropriate.

<b>Interrogatory No.</b>	<b>Bates Range</b>
30a. the replacement of the primary superheater at Rush Island Unit 1 in 2001;	AM-00072926 - AM-00072954; AM-00081631 - AM-00081659
30b. the replacement of the primary superheater at Rush Island Unit 2 in 2003;	AM-00072756 - AM-00072770; AM-00081631: AM-00081659
30c. the replacement of the immediate pressure/high pressure turbine at Rush Island Unit 1 in 2001	AM-00072257 - AM-00072265;
30d. the replacement of the immediate pressure/high pressure turbine at Rush Island Unit 2 in 2003	AM-00072368 - AM-00072375; AM-00174392 - AM-00174437
30e. the replacement of the economizer, reheater, and lower slope tubes at Rush Island Unit 1 in 2007	AM-00072570 - AM-00072615
30f. the replacement of the economizer and reheater at Rush Island Unit 2 in 2010	AM-00072829 - AM-00072830; AM-00072831: AM-00072849; AM-00072570 - AM-00072615
30g. the replacement of the air preheaters at Rush Island Unit 1 in 2007	AM-00072850 - AM-00072868
30h. the replacement of the air preheaters at Rush Island Unit 2 in 2010	AM-00072906 - AM-00072907; AM-00072908 - AM-00072925

**INTERROGATORY NO. 31:**

Identify each Project Justification Data Table, by Bates number, that You used to prepare, and that corresponds to, each final full work order authorization and project justification identified in response to Interrogatory No. 30.

**RESPONSE TO INTERROGATORY NO. 31:**

In addition to the General Objections, Ameren objects to this Interrogatory on the grounds that it consists of at least 8 discrete subparts and that each of those discrete subparts should be set out in a separate interrogatory pursuant to Federal Rule of Civil Procedure 33(a). Ameren incorporates its objections and response to Interrogatory No. 29 as and for its objections and response to Interrogatory No. 31.

**INTERROGATORY NO. 32:**

Describe in detail the formula identified in the red-lined box in Exhibit A to these interrogatories, including but not limited to the purpose for which Ameren used or uses the formula, the full and complete definition and meaning of each input identified in the formula, a detailed explanation of why each input is included in the formula, the source of data used to prepare each input to the formula, the name, title, and office of each person responsible for preparing each input to the formula, and the name, title, and office of each person responsible for performing calculations with the formula. For your reference, Exhibit A is an excerpt of a document with Bates range: AUE-00259913 – AUE-00259928. The formula referred to in this interrogatory appears on AUE-00259913.

**RESPONSE TO INTERROGATORY NO. 32:**

Ameren objects to this Interrogatory on the grounds that the information it seeks is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. Ameren further objects to this Interrogatory because it invites speculation.

Subject to and without waiving these objections and the General Objections, Ameren states that after a reasonable inquiry, Ameren is unable to respond to Interrogatory No. 32. In the course of its business, Ameren generates numerous spreadsheets similar to the referenced spreadsheet. Ameren does not generally maintain records of the specific purpose for a given worksheet or the sources for the inputs to such worksheets. Moreover, due to the passage of time and the number of worksheets and spreadsheets historically prepared by Ameren, Ameren personnel are unable to recall these details or who prepared the referenced formula.

**INTERROGATORY NO. 33:**

Describe in detail the column enclosed in the red-lined box on Exhibit B to these interrogatories, including but not limited to the definition of the term “Other” as used on Exhibit B, how numerical values in the column titled “Other” were derived, the identity of all documents, by Bates range, that supply the data for the values under the column titled “Other,” all assumptions used in calculating the values under the column titled “Other,” and the identity all persons with knowledge of the term “Other” as used in Exhibit B and the values identified on the column titled “Other.” For your reference, Exhibit B is an excerpt of a document with Bates range AUE-00260498 – AUE-00260541, and the column in the redlined box appears the page Bates numbered AUE-00260524.

**RESPONSE TO INTERROGATORY NO. 33:**

Ameren objects to this Interrogatory on the grounds that the information it seeks is not relevant to the subject matter of this litigation and is not reasonably calculated to lead to the discovery of admissible evidence. Ameren further objects to this Interrogatory because it invites speculation.

Subject to and without waiving these objections and the General Objections, Ameren states that after a reasonable inquiry, it is unable to determine the purpose of the “Other” value in the referenced column of the referenced spreadsheet. In the course of its business, Ameren generates numerous spreadsheets similar to the referenced spreadsheet. Ameren does not generally maintain records of the specific purpose for a given worksheet or the sources for the

inputs to such worksheets. Moreover, due to the passage of time and the number of worksheets and spreadsheets historically prepared by Ameren, Ameren personnel are unable to recall these details or who prepared the referenced values.

**INTERROGATORY NO. 34:**

Identify the point in time at which Defendant became aware of its ability to obtain an applicability determination from EPA or the Missouri DNR pertaining to the Nonattainment NSR or PSD generally, and relating to each of the Rush Island Projects. Include in your response the identity of every document that contains this information, and the name, title, and office of each person with knowledge of this information.

**RESPONSE TO INTERROGATORY NO. 34:**

Ameren objects to this Interrogatory on the grounds that it seeks information that is neither relevant to the subject matter of this action nor reasonably calculated to lead to the production of admissible evidence. Ameren further objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome to the extent it seeks “the identity of every document” and the identity of “each person with knowledge.” Ameren further objects to this Interrogatory on the grounds that the request may seek information that is subject to the attorney-client or attorney work-product privileges.

Subject to and without waiving these objections and the General Objections, Ameren states that it had no reason or need to seek a determination because the Projects were not the sort of activities that could reasonably be expected to trigger PSD requirements, including because they would not reasonably be expected to cause any emissions increase for the reasons stated in response to Interrogatory No. 22 and Interrogatory No. 27. Moreover, Ameren was not required to obtain such a determination. EPA has specifically acknowledged that:

In most instances, source owners or operators are able to readily ascertain whether new source review requirements apply to them. Consequently, in administering these requirements, EPA does not

require sources to obtain a formal applicability determination before proceeding with construction. In keeping with that practice, EPA will not require utilities to seek applicability determinations under either the revised regulations proposed today or the interpretations of the existing regulations contained in this preamble.

56 Fed. Reg. 27,639 (1991); *see also* 57 Fed. Reg. 32,332 (1992). Even if Ameren had sought an applicability determination, neither EPA nor MDNR was obligated to respond to Ameren at all or in a timely fashion. Thus, while Ameren was aware in a general sense of the opportunity to ask for an applicability determination, that awareness does not cure EPA's failure to promulgate clear, unambiguous and consistent rules and regulations, or interpretations thereof, and it does not cure EPA's failure to provide fair notice to Ameren.

**INTERROGATORY NO. 35:**

Describe in detail each and every instance in which a coal-fired utility owner or operator replaced the economizer, reheater, air preheater, and lower slope tube panels at a single EGU during a single outage prior to the 2007 Rush Island Unit 1 Project, including but not limited to the total cost of such project in 2007 dollars.

**RESPONSE TO INTERROGATORY NO. 35:**

Ameren objects to the term "utility" as vague and ambiguous and as mischaracterizing the law. Projects undertaken by other companies, whether they are regulated utilities or not, may be relevant. Ameren objects to this Interrogatory on the grounds that much of the information it seeks is proprietary, confidential business information which is not available to Ameren. A portion of responsive information may be available to Ameren's outside counsel and any experts retained by Ameren on this topic in the future, but it is likely that Ameren's counsel will never obtain complete information on this topic. Ameren further objects to this Interrogatory on the grounds that it is premature at this stage of the litigation as Ameren has not yet received responses to the majority of its discovery on the topic of routine maintenance at other power

plants. Ameren further objects to this Interrogatory on the grounds that to the extent it excludes projects performed after 2007, it excludes potentially relevant evidence. Ameren further objects to this Interrogatory to the extent that it requires Ameren to perform calculations or seeks information that is already in EPA's possession or is equally available to EPA, including, specifically, the ability to calculate the cost of similar projects in "2007 dollars."

Subject to and without waiving these objections and the General Objections, Ameren understands that companies that own or operate boilers, including utilities, commonly replace boiler components, including economizers, reheaters, air preheaters, and lower slope tube panels, for safety, efficiency or reliability reasons. Ameren is largely unaware of the specifics of many particular replacement activities, because such details are commonly regarded as confidential, business proprietary information that is not made publicly available. Some publicly available information exists, including the Tennessee Valley Authority's 2000 report on utility maintenance practices summarized in the Federal Register. *See* 65 Fed. Reg. 35,154, 35,155. That summary states that the "maintenance, repair, and replacement of unit components are necessary to achieve reliable and safe operation of a generating unit throughout its useful life. To do this, TVA and other electric utilities routinely conduct maintenance activities that are proactive, reactive, and predictive." *Id.* The report provided the following examples of the frequency of maintenance activities at power generating units similar to Rush Island: reheater replacements (231 replacement projects in a sample of 190 generating units); and economizer replacements (98 replacement projects in a sample of 202 generating units). Jerry L. Golden, Routine Maintenance of Electric Generating Stations, Tennessee Valley Authority, at p. 1, 31, 35 (2000). Ameren also states that it is aware of the host of boiler tube replacement projects



performed by various companies around the nation that were identified in EPA's various NOV's issued in recent years. Those NOV's are already in EPA's possession.

Ameren's investigation is continuing, and it will supplement this response as appropriate. This issue may also be the subject of expert testimony, and Ameren reserves all rights to disclose such expert testimony in accordance with the schedule established by the Court.

**INTERROGATORY NO. 36:**

Describe in detail each and every instance in which a coal-fired utility owner or operator replaced the primary superheater and high pressure/ intermediate pressure turbine during a single outage prior to the 2001 Rush Island Unit 1 Project, including but not limited to the total cost of such project in 2001 dollars.

**RESPONSE TO INTERROGATORY NO. 36:**

Ameren incorporates its objections and response to Interrogatory No. 35 as and for its objections and response to this Interrogatory. Ameren further objects to this Interrogatory on the grounds that to the extent it excludes projects performed after 2001, it excludes potentially relevant evidence. Ameren states that on two occasions at the Rush Island plant, it performed this combination of projects during a single maintenance outage: once in the fall of 2001 and again in the fall of 2003.

**INTERROGATORY NO. 37:**

To the extent that you contend that any project at issue in this case may be excluded or is subject to an exception to the New Source Review requirements because the project was a "Pollution Control Project," or that any emissions increase was solely due to a fuel switch to a fuel which the unit was capable of accommodating, describe in detail the factual and legal basis of Your contention.

**RESPONSE TO INTERROGATORY NO. 37:**

Ameren objects to this Interrogatory on the grounds that Plaintiff's contention interrogatories are premature at this early stage of discovery. Ameren further objects to this

Interrogatory on the grounds that it consists of 2 discrete subparts on distinct topics and that each of those discrete subparts should be set out in a separate interrogatory pursuant to Federal Rule of Civil Procedure 33(a). Ameren further objects to this Interrogatory as mischaracterizing the law to the extent it implies that any fuel switch exclusion or exception applies only to an emission increase “due solely to a fuel switch.”

Subject to and without waiving the General Objections, Ameren states that its economizer and reheater replacements were due to its switch from bituminous coal to 100% low-sulfur Powder River Basin coal, as explained in Ameren’s response to Interrogatory No. 22. Moreover, because of the more rapid slag accumulation on the reheater and superheater caused by the composition of PRB coal, those large slag accumulations fall with greater frequency, landing on the lower slope boiler tubes, resulting in tube leaks. Increasing the spacing between the reheater boiler tubes and rearranging the economizer boiler tubes to be in-line rather than in a staggered configuration were necessary because of the switch to low-sulfur PRB coal. Accordingly, each of these activities was or was part of a “Pollution Control Project.” *See, e.g.*, 57 Fed. Reg. 32319 (July 21, 1992).

Ameren also contends that the superheater boiler tube replacements conducted during the 2001 and 2003 outages are “Pollution Control Projects,” because they were at least in part necessary due to the negative burner tilts being used by Ameren to reduce NO<sub>x</sub> emissions. Because the burners were tilted downward to encourage combustion lower in the boiler, the temperatures near the superheater were lower than they otherwise would have been absent the negative burner tilt, resulting in less heat transfer to the superheater, and thus lower-than-designed steam temperatures. Moreover, Ameren contends that the turbine replacement and

superheater replacements actually reduced the rate of emissions at both Rush Island units.

Ameren incorporates its response to Interrogatory No. 27.

Ameren's investigation is continuing, and it will supplement this response if and when it learns additional information responsive to this Interrogatory.

Dated: August 1, 2012

/s/ Matthew B. Mock

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Renee Cipriano  
Steven J. Bonebrake  
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*Counsel for Defendant Ameren Missouri*

**CERTIFICATE OF SERVICE**

I hereby certify that on August 1, 2012, I caused a copy of the foregoing **Ameren Missouri's Responses and Objections to Plaintiff's Second Set of Interrogatories** to be transmitted via electronic mail to the following counsel of record:

Justin A. Savage  
Andrew C. Hanson  
Bradford T. McLane  
U.S. Department of Justice  
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Washington, DC 20044-7611  
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nigel.cooney@usdoj.gov

/s/ David M. Loring


**DECLARATION**

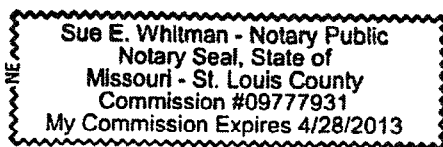
I, Steven Whitworth, have reviewed Ameren Missouri's Responses and Objections to Plaintiff's Second Set of Interrogatories. I am informed and believe that the factual matters stated therein as to the responses to Interrogatory Nos. 23, 24, 25, 26, 28, 34 and 37 are true. These responses were prepared with information made available from multiple sources, are not based entirely upon my personal knowledge and reflect information thus far discovered. Ameren Missouri reserves the right to change or supplement these responses or to apply for relief to permit insertion of unintentionally omitted matter.

Executed on August 21, 2012.

  
Steven Whitworth

Subscribed and sworn to  
before me on this 21st day  
of August, 2012.

  
Notary Public  
My Commission Expires:



**DECLARATION**

I, David Boll, have reviewed Ameren Missouri's Responses and Objections to Plaintiff's Second Set of Interrogatories. I am informed and believe that the factual matters stated therein as to the responses to Interrogatory Nos. 27, 30, 36 and 37 are true. These responses were prepared with information made available from multiple sources, are not based entirely upon my personal knowledge and reflect information thus far discovered. Ameren Missouri reserves the right to change or supplement these responses or to apply for relief to permit insertion of unintentionally omitted matter.

Executed on August 21, 2012.



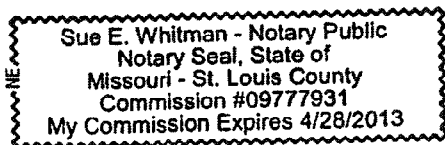
David Boll

Subscribed and sworn to  
before me on this 21 day  
of August, 2012.



Notary Public

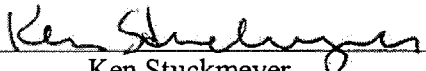
My Commission Expires:



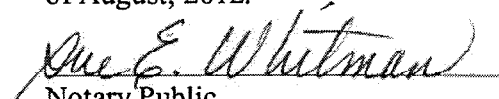
**DECLARATION**

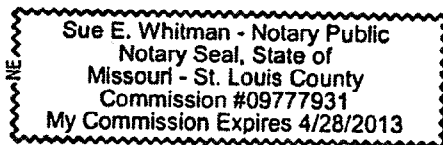
I, Ken Stuckmeyer, have reviewed Ameren Missouri's Responses and Objections to Plaintiff's Second Set of Interrogatories. I am informed and believe that the factual matters stated therein as to the responses to Interrogatory Nos. 23, 27 and 37 are true. These responses were prepared with information made available from multiple sources, are not based entirely upon my personal knowledge and reflect information thus far discovered. Ameren Missouri reserves the right to change or supplement these responses or to apply for relief to permit insertion of unintentionally omitted matter.

Executed on August 21, 2012.

  
Ken Stuckmeyer

Subscribed and sworn to  
before me on this 21 day  
of August, 2012.

  
Notary Public  
My Commission Expires:




**DECLARATION**

I, David Queensen, have reviewed Ameren Missouri's Responses and Objections to Plaintiff's Second Set of Interrogatories. I am informed and believe that the factual matters stated therein as to the responses to Interrogatory Nos. 32 and 33 are true. These responses were prepared with information made available from multiple sources, are not based entirely upon my personal knowledge and reflect information thus far discovered. Ameren Missouri reserves the right to change or supplement these responses or to apply for relief to permit insertion of unintentionally omitted matter.

Executed on August 22, 2012.

  
David Queensen

Subscribed and sworn to  
before me on this 22 day  
of August, 2012.

  
Notary Public  
My Commission Expires:

